



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
OREGON OPERATIONS OFFICE
805 SW Broadway, Suite 500
Portland, Oregon 97205

April 21, 2010

Mr. Jim McKenna
Port of Portland & Interim Chairman, Lower Willamette Group
121 Northwest Everett
Portland, Oregon 97209

Re: Portland Harbor Superfund Site; Administrative Order on Consent for Remedial Investigation and Feasibility Study; Docket No. CERCLA-10-2001-0240

Dear Mr. McKenna:

This letter provides EPA's direction to the Lower Willamette Group (LWG) on Preliminary Remediation Goals (PRGs) for use in the Portland Harbor Feasibility Study (FS). EPA and the LWG have been working on developing and refining the list of PRGs over the last few months, and EPA believes that the list has been sufficiently refined for the LWG to proceed with development and evaluation of cleanup alternatives. This letter also confirms our understanding about additional evaluations and analysis that we have been discussing related to use of these PRGs, and additional guidance regarding use of the benthic PRGs.

The LWG provided the most recent list of PRGs in a March 24, 2010 email to EPA. EPA has determined that these PRGs should be used in the development and screening of alternatives for the FS as described below. EPA and the LWG have also been discussing specific examples, outlined below, where the LWG may provide additional information and evaluation of the PRGs.

- The LWG needs to use all of the PRGs in the PRG list (see attached table) in the development and screening of alternatives. It is EPA's expectation that most, if not all, of the PRGs in this list will also be carried forward for use in the evaluation of the final cleanup alternatives. It should also be understood that EPA and its partners are still in the process of finalizing our review of the draft RI and risk assessment comments, and although we currently do not anticipate any significant changes to the list of COCs and PRGs, it is possible that some limited changes would be needed based on the results of our review.
- The LWG may present technical information and evaluations regarding the uncertainty, reliability, and general strength of the lines of evidence supporting each PRG. EPA expects that such information and evaluations will be provided prior to or as part of the alternatives screening check-in.

- The LWG may include a comparison of areas identified through application of PRGs to the areas where risks were actually found in the risk assessment prior to or as part of the screening of alternatives check-in. The specific example we have discussed was comparison of clam consumption PRGs to actual contaminant levels in clam tissue near Sauvie Island.
- The LWG may present and discuss how risk assessment exposure assumptions underlying the PRGs line up with expected current exposures or likely future exposures (e.g., the actual expected water depths of future clam collection or the water depths that sculpin are expected to regularly inhabit and likely habitat mitigation and/or restoration areas). If this results in reduction of areas, the LWG will provide this information to EPA for review prior to or as part of the screening of cleanup alternatives. Also prior to or as a part of the alternatives screening check-in, the LWG may present information regarding data quality, data density, and related mapping results that may impact the accuracy or interpretation of PRG mapping.

EPA will consider all of the above evaluations as well as any other appropriate information to determine how PRGs are utilized in future stages of the FS analysis. Please note that EPA will not require the LWG to develop or use bird egg LOE PRGs at this time, but EPA may develop and provide bird egg PRGs to LWG in the future. At that time, the LWG will indicate to EPA whether the LWG 1) agrees to incorporate such PRGs into the draft FS and/or 2) whether the PRGs can be incorporated into the alternatives screening and/or the draft FS without schedule delays. Based on some initial estimates, the bird egg PRGs may fall within the range of PRGs currently being evaluated for PCBs, DDE, and PCDF.

Benthic PRGs

EPA has not yet completed its review of the Benthic Reanalysis Technical Memorandum dated November 13, 2009 nor the Site-Specific SQGs based on Individual Bioassay Endpoints dated April 2, 2010. EPA expects to develop a benthic approach based on our review of these documents and other relevant information. The benthic approach developed by EPA should be considered in the draft FS as the schedule allows. We have discussed three options for including the benthic approach : 1) near term - in time to be incorporated into remedial action alternative screening step, 2) Mid-term - after the screening step but in time to be incorporated into draft FS, and 3) long-term - to be incorporated into a revised FS. In the meantime, EPA is providing direction for evaluating benthic risk in the draft FS:

EPA's primary goals for evaluation of benthic risk in the FS include the following:

- Define areas that pose unacceptable risk to the benthic community
- Define the areas and volume of contamination that may pose risk to the benthic community
- Evaluate remedial action alternatives and effectiveness (did it meet the RAO)

Guidelines:

- All benthic SQGs in the March 24, 2010 list will be included in the analysis. If specific SQGs are found to be inconsistent with other LOEs listed below, EPA will review the analysis and determine whether these should be included in the draft FS.
- Sediment toxicity bioassays will form the primary LOE for this analysis. The sediment toxicity LOE will include level 2 (moderate) and level 3 (severe) effects for all four endpoints (chironomus biomass and mortality and hyalella biomass and mortality).
- The analysis will consider the number and degree of exceedance of SQGs.
- The analysis will consider other LOEs such as TZW compared to ambient water quality criteria for the protection of aquatic life and benthic tissue TRVs.
- The analysis will consider the presence/absence of nearby sources and examine benthic community structure (e.g., via sediment profile imaging and related information).
- The analysis will consider data quality and data density issues for the SQGs.

In summary, EPA believes that the PRGs have been sufficiently refined to proceed with the development and screening of cleanup alternatives, including cost and volume estimates. Overall, EPA expects that these PRGs will continue to be refined through the FS process, and it is our goal that any refinements can be incorporated into the FS with minimal impact on overall project schedule.

We look forward to working with the LWG on the development and screening of cleanup alternatives and the draft FS. If you have any questions regarding this matter, please contact Chip Humphrey at (503) 326-2678 or Eric Blischke (503) 326-4006. All legal inquiries should be directed to Lori Cora at (206) 553-1115.

Sincerely,

Chip Humphrey
Eric Blischke
Remedial Project Managers

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